

Title (en)

A VULNERABILITY DRIVEN HYBRID TEST SYSTEM FOR APPLICATION PROGRAMS

Title (de)

SCHWACHSTELLENGESTEUERTES HYBRIDES TESTSYSTEM FÜR ANWENDUNGSPROGRAMME

Title (fr)

SYSTÈME DE TEST HYBRIDE AXÉ SUR LA VULNÉRABILITÉ POUR LES PROGRAMMES D'APPLICATION

Publication

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Application

EP 20166809 A 20200330

Priority

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Abstract (en)

[origin: EP3754527A1] According to one embodiment, a system receives an intermediate result generated by a compiler based on source code, where the intermediate result includes one or more vulnerability indicators indicating one or more lines of the source code being potentially vulnerable. The system performs a grey box fuzzing on a first executable code generated from the intermediate result to generate a first set of seed inputs. The system calculates a vulnerability score for each of the seed inputs of the first set based on the vulnerability indicators for the lines of the source code reachable but has not been explored by the grey box fuzzing. The system selects one of the seed inputs in the first set having a highest vulnerability score. The system performs a concolic execution using the selected seed input as priority, the concolic execution being performed on a second executable code generated from the intermediate result.

IPC 8 full level

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CPC (source: CN EP KR US)

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